



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/728,370	12/03/2003	Glen Darling	50325-0841	6391

29989 7590 03/23/2007  
HICKMAN PALERMO TRUONG & BECKER, LLP  
2055 GATEWAY PLACE  
SUITE 550  
SAN JOSE, CA 95110

EXAMINER  
STEELMAN, MARY J

ART UNIT PAPER NUMBER

2191

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/23/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

Application No.

10/728,370

Applicant(s)

DARLING ET AL.

Examiner

Mary J. Steelman

Art Unit

2191

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 03 January 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 32-62 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 32-62 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 10/24/2006.
- 4) ☒ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. 03/16/2007.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. This Office Action is in response to Remarks and Amendments received 01/03/2007. Per Applicant's request claims 1-31 are cancelled. New claims 32-62 are added. Claims 32-62 are pending. IDS received 10/24/2006 has been considered.

#### ***Specification***

2. In view of the amendment to the Specification, the prior objection is hereby withdrawn.

#### ***Claim Objections***

3. In view of the cancellation of claims 1-31, the prior objections are withdrawn.

#### ***Claim Rejections - 35 USC § 101***

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 51-57 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. New claim 51 requires an amendment, to reflect a statutory embodiment. "A computer-readable medium, embodied on a storage device...", as supported by the Specification, [0214].

#### ***Response to Arguments***

5. Applicant's arguments have been considered but are moot in view of the new grounds of rejection.

Examiner dose not understand Applicant's comments on page 12. Claim 32 did not exist in the former office action. Claims were rejected under USPN 5,754,858 to Broman et al., in

Art Unit: 2191

view or US Patent Application Publication 2003/0217193 A1 to Thurston et al., and further in view of US Patent Application Publication 2004/0133875 A1 to Kramer.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 32-62 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent Application Publication 2003/0172135A1 to Bobick et al.

Per claims 32, 37, 44, 51, and 58:

A method of a development and build environment for packaged software delivery in a distributed network of nodes, the method comprising the computer-implemented steps of:

Bobick: [0068], packaging assets for processing and distribution over network...asset having a logic/data portion and an asset extended environment portion, and a package extended environment that includes package information associated with at least one asset.

-compiling source code files into executable file modules;

Art Unit: 2191

Bobick: [0339], An asset 200 may be defined as some meaningful partitioning of an application from the source environment...parts of the source environment that are selected to that the asset 200 can be distributed across a network. [0359], assets 240 are discovered in the source environment...creates an intermediate representation (compiled) [0367], target processing asset adapter method 1900 (FIG. 19), targeted processing to change the Logic/Data section 210 of the asset data structure 240 in order to provide a unique asset...for one or more specific targets (compile).

-wherein each of one or more modules contains an image for a process or a dynamically linked library (DLL);

Bobick: [0317], An asset may be a logical organization of information (e.g., software and data) that may serve as all or part of a package.

-creating a software package that comprises the one or more modules, wherein the software package is delivered to the nodes in the distributed network;

Bobick: [0317], A package structure may be composed of one or more assets. [0318], Various kinds of assets may be used in a package [0339], An asset 200 may be defined as some meaningful partitioning of an application from the source environment...parts of the source environment that are selected to that the asset 200 can be distributed across a network.

-wherein the software package is created based on at least one of a feature, characteristic, or purpose;

Art Unit: 2191

Bobick: [0325], Assets may be categorized by their purpose

-creating metadata for a first module, of one or more modules, that includes any module information such as the first module's: binary signature, name, directory path, and characteristics;

Bobick: [0360], extended environment information 220 for an asset 240, put into an asset data structure 240. [0372], The EE 220 (extended environment) has one or more common descriptors 210B, one or more asset dependency descriptors 222B, one or more target server dependencies 226B. [0373], Examples of common descriptors 210B include...a digital asset name...a unique fully qualified name...an address...a size...a volatility descriptor,...a security descriptor...

-inserting the metadata of the first module into the software package;

Bobick: [0372], The EE 220 (extended environment) has one or more common descriptors 210B, one or more asset dependency descriptors 222B, one or more target server dependencies 226B.

-gathering application program interface (API) dependency information for the first module, wherein the first module can provide and use at least one API, by

- (a) receiving a list of dependent modules for a given process or DLL module of the first module;

Bobick: [0375], asset dependency descriptors

Art Unit: 2191

- (b) storing, in the metadata of the first module, dependency information for the dependent modules in the list, wherein the dependency information includes API names and versions that the process or DLL module depends on;

Bobick: See FIG. 2B #220, Extended Environment & related text at [0377-0388], EE 220 has package relationship (dependency relationships) descriptors 285B [0396], reference descriptors 260B

- (c) collecting additional dependency information documented in one or more additional modules specifications, wherein the additional dependency information includes API names and versions that the process or DLL module depends on;

Bobick: [0372], The EE 220 (extended environment) has...one or more asset dependency descriptors 222B (As an example, one or more (additional dependency information)

- (d) storing the additional dependency information in the metadata of the first module.

Bobick: [0329], EE 220 is a data structure (storage) containing descriptors and/ or other information required.

Per claims 33, 38, 45, 52, and 59:

-a linker creates the list of dependent modules for the given process or DLL module and places the list in the metadata of the first module.

Art Unit: 2191

Bobick: [0377-0379] EE 220 has package relationship descriptors 285B that represents a part-whole relationship between the digital asset 240 and one or more packages containing the digital asset. [0379], the specific package does not possess the property of correctness unless the specific digital asset is included...this relationship can further imply the existence of the other digital assets that are members of the specific package (list of dependent modules for given process or DLL) [0383], The EE 220 includes one or more base environment descriptors 225B (e.g., target server dependencies descriptors 226B) (dependent modules) that identify a base execution environment on one or more target computers. The base execution environment 250 is required to execute the digital asset... [0433] FIG. 6 package data structure showing the assets associated with a package...identifies the assets that are grouped together in a package

Per claims 34, 40, 47, 54, and 60:

- creating metadata for each API;

- inserting the API metadata into the software package, wherein metadata for an API includes, but is not limited to: the API's name and version.

Bobick: Creating EE (metadata) for each asset (see above). Creating package structures ([0433+], #600), example API's disclosed at [0438]: a Web server for an SC asset, a Java servlet engine for a JSP, a Java Runtime Environment for a Java class asset, and application server for an EJB asset...DBMS for data assest, a Minimum Application Server (MAS) may be used in the base envorinment. The MAS may provide the minimal services that an application when distributed to a client (application programming interfaces). Also see APIs at [0439], adapters: a discovery adapter, a versioning adapter, an export adapter, a process adapter, a target



Art Unit: 2191

adapter, a client deployment adapter, a synchronization adapter, a bridging adapter, an adjustments adapter, a streaming adapter, a quality of service adapter...

[0466], asset identifier field 820 (name) may uniquely identify the asset...version field 830

[0488], FIG. 14, package definition data structure 1400, package identifier field package ID, name and / or any other information that may uniquely identify a packager such as, for example, a package number (version)

Per claims 35, 41, 48, 55, and 61:

-calculating a binary signature for each module of the one or more modules and inserting the binary signature into the respective module's metadata;  
wherein each unique version of a module will have a unique binary signature.

Bobick: [0401], security descriptors (binary signatures)

Per claims 36, 43, 50, 57, and 62:

-creating metadata for the software package that includes any package information such as the software package's: name, build date, and characteristics;  
-inserting the metadata of the software package into the software package.

Bobick: engagement table 100H may contain a plurality of system part 120H to target node 130H pairs...Each engagement pair may contain a unique part identifier...name...address and / or any other identifier capable of uniquely identifying (Each asset for the software package

Art Unit: 2191

includes information placed in the package.) [0327], A package may be categorized by type and / or a set of types...may include one or more assets...may have a package type...An asset type is an identifier of an asset...may also determine what information that the asset, and hence the package, need to execute on any given remote target environment. A package specification includes a description of the package structure (metadata) including the package types.

Per claims 39, 46, and 53 :

-collecting additional dependencies documented in one or more additional module specifications and placing them into the metadata of the first module;  
wherein the additional dependencies documented in each module lists API names and versions that the process or DLL module depends on.

See limitations addressed in claim 1 above. [0354], a package structure may contain one or more assets...

Per claims 42, 49, and 56:

-packages are created based on at least one of a feature, characteristic, or purpose.

Bobick: [0340], An asset may be categorized by the content and / or purpose...

Art Unit: 2191

*Conclusion*

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mary Steelman, whose telephone number is (571) 272-3704. The examiner can normally be reached Monday through Thursday, from 7:00 AM to 5:30 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wei Zhen can be reached at (571) 272-3708. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2100 Group receptionist: 571-272-2100.

Art Unit: 2191

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mary Steelman

03/16/2007

*Mary Steelman*  
*Primary Examiner*